CHALLENGES OF FISH FARMERS IN ONDO STATE

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ABSTRACT

This study assessed fish farmers in Ondo State, south west agro-ecological zone of Nigeria using a sample size of 100 respondents, selected through a multi-stage sampling technique. Instrument for data collection was semi-structured questionnaire. Data were analysed using frequency counts and % s of the respondents. Results showed that majority (52.0%) of the respondents are middle aged, 95.0% male, 93.0% married with a higher education (45.0%). The most important fisheries technology adopted by the farmers is disease control management. 67% indicated lack of finance and high cost of fish seed (58.0%) as the most important problems encountered. It was recommended that adequate incentive and grants should be given to farmers to finance fish production.

INTRODUCTION

Aquaculture in Nigeria dates back to about 50 years ago (Miller, 2003). It was born out of the need to check over exploitation of aquatic resource in water bodies, avoidance of extinction of certain fish species and for sustainability of fisheries and other aquatic resources for the teaming population. Studies showed that farmers have adopted backyard fish farming referred to as "homestead fish farming" and improved fisheries technologies (Nwabeze *et al*, 2007). Ayanda (2003) ascertained that the level of aquaculture practices in Nigeria over the years still remains extensive and semi-intensive. In spite of fisheries technology development and adoption, the quantity of fish importation in 2002 was 681, 151.80 metric tones valued at US $ 375,027,917.90 million, thereby making Nigeria the highest fish importer in Africa (Miller, 2003 and Eyo, 2004). Data on domestic fish production (in metric tons) has shown downward decline over the years, thus, 2005 (579,544), 2006 (636,848) and 2007 (615,507) as reported by FDF (2008). This has contributed to deficit of 1.4 million metric tons in fish supply (Fish network, 2009).

In the south west agro-ecological zone, aquaculture technology is a fast growing industry and provides sufficient animal protein supplement and substitute for capture fisheries. Improved fisheries technology is intended to increase productivity and the income earning of fish farmers. According to Federal Office of Statistic (1999), decline in productivity in the country could be attributed to low use of information as well as the improved technologies. The adoption of proven technology is to increase fisheries output which would also increase household disposable income. In order to sustain average domestic production to meet the demand of 1.6 million metric tones per annum (Fish network, 2009); an assessment of challenges faced by fish farmers need to be carried out in order to guide the policy on how best to bridge the gap that exist in fish production. The study's objective is to assess fish farmers in Ondo State, south west agro-ecological zone of Nigeria and in specific terms to;

(i) identify the socio economics variable of the fish farmers in the study area.
(ii) examine production constraints faced by the farmers in the study area.
(iii) assess fish farmers knowledge and adoption of improved production practices.

MATERIALS AND METHODS

The sample of the study was drawn from the population of fish farmer in Ondo State, south west agro-ecological zone through a multi-stage sampling technique. The state is divided into six zones (Akure, Owo, Ondo, Akoko North, Ikare and Okitipupa) according to Agricultural Development Programme (ADP) delineation. Four ADP zones (Akure, Owo, Ondo and Okitipupa) out of the six zones were purposively selected. Secondly, three cells were randomly selected in each block. In absence of the researcher inaccessibility to data on sampling frame 25 fish farmers were selected using purposive sampling in each of the three selected cells in each chosen block. Finally, a sample of 100 fish farmers formed the sample size for the study. Semi-structured questionnaire containing open and closed ended question was used to elicit information from the respondents; this was obtained by interview schedule. Data generated from the study were ana'ysed using descriptive statistics.

RESULT AND DISCUSSIONS

Selected Socio-economic Variables of the Respondents

Table 1 shows that majority (95.0%) of the fish farmers in the study area are males while the rest (5.0%) are females. The low percentage of the female fish farmers could be attributed to limited access to information and credit facilities among others. In fisheries, women are mainly involved in fish processing, fish mongering and fish marketing to mention just a few channels of production. This agrees with the findings of Uchola (2000) and Alamu (1999) that women prefer marketing and distribution. Most (71. 0%) of the fish farmers are middle aged (41 - 60 years) with the potential to sustain fish farming and are more willing to follow the dynamism of fish farming. The findings also suggest that the respondents are economically active and independent. Majority (45.0%) of the respondents have higher education. This will affect respondents' positive responses to improve techniques of fish culture (Nwabeze *et al*, 2007). 93% of the respondents are married. A higher proportion of married respondents have implication on the quantity of labour available for fish farming activities. Most (68.0%) of the respondents operate semi-intensive fish farming system with 58.0% having an average pond size of 250m^2.

Table 1. Distribution of Respondents According to some Selected Personal Characteristics

Characteristics	Variable	Frequency	%
Sex	Male	95	95
	Female	05	05
	Total	100	100
Age	Below 20	0	0
	21 – 40	28	28
	41 - 60	52	52
	Above 61	20	20
	Total	100	100
Marital Status	Married	93	93
	Single	06	06
	Divorced	01	01
	Total	100	100
Educational background	Non formal	12	12
	Elementary	03	03
	Secondary	40	40
	Tertiary education	45	45
	Total	100	100

Production Challenges Faced by the Farmers

Figure 1 shows that the most important problem faced by the respondents are lack of finance (67.0%) and high cost of fish seed (58.0%). This could be attributed to lack of assess to micro credit institution among the respondents. High cost of inputs, lack of capital and credit facility has been found to be the primary constraints facing fisherfolks (DFID/FAO, 2004). The least important problem faced by the respondents' is lack of fisheries information (3.0%) and inadequate knowledge (4.0%). This could be attributed to effective extension delivery services in the area.

Fish Farmers Knowledge and Adoption of Improved Production Practices

Majority (64.0%) of the respondents adopt disease control management while 56.0% adopted water quality management. Disease and poor water quality management adversely account for increased mortality and subsequently low income earned in fish farming (Subasinghe and Bernoth, 2000). Most (50.0%) of the respondents adopted fish feed formulation. In fish farming, fish feeds account for about 60 percents of variable cost (Akiyama, 1988 as cited by Eyo 1989). This could be attributed to 50.0 % of the fish farmers resulting to adopting the technology of fish feed formulation. However, fewer percentages (16.0%) of the respondents adopted the use of natural fish food. This implies increased cost of production that would be borne due to high cost of procuring unconventional feed. The low level of adoption of fish processing/preservation (18.0%) and integrated fish farming (17.0%) shows a high level of unwillingness to adopt the technologies.

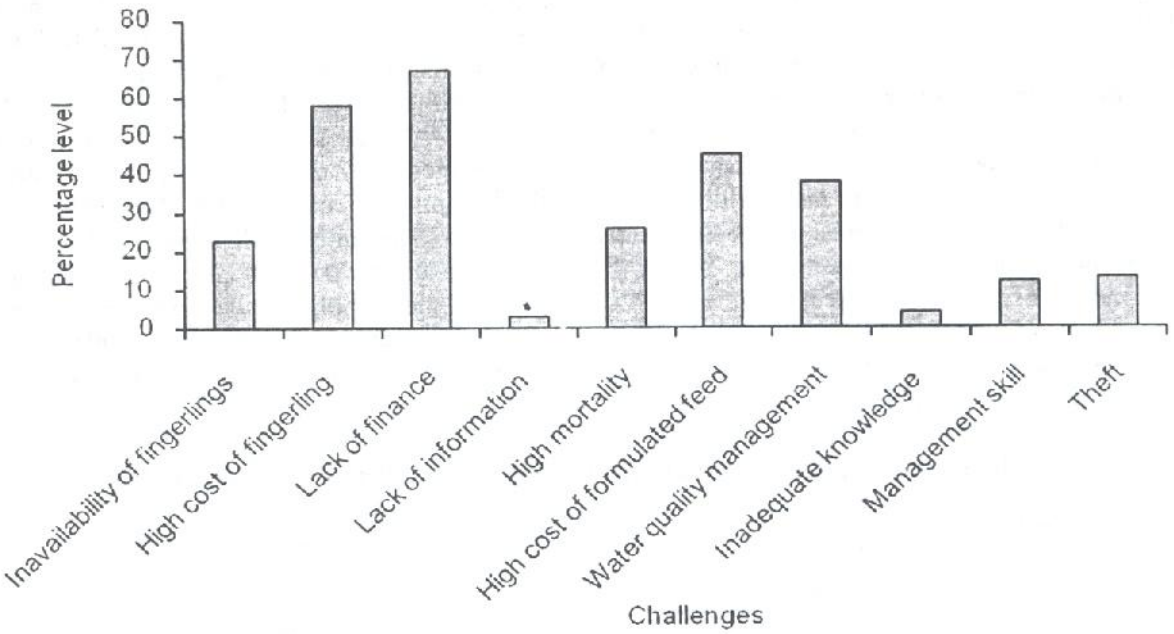

Figure 1: Percentage level of production challenges faced by fish farmers

CONCLUSION AND RECOMMENDATIONS

The study concludes that in spite of the various aquaculture technology adopted by the fish farmers which are disease control management and water quality management, artificial feed formulation, a lot still has to be done in order to fully realize the advantage accruable from fish farming in the study area. However, high cost of formulated feed is a major problem faced by the fish farmers.

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